Amendments to the Specification:

Please replace the paragraph bridging pages 16 and 17, with the following amended paragraph:

Next, the sectional structure of the active matrix substrate constituting the integral image recognition/display apparatus will be explained. Reference is to be had to Fig. 5. The sensor portion A and the sensor portion B are disposed inside one pixel as shown in ~~Fig. 2~~ Fig. 4.

Please replace the paragraph beginning at page 35, line 15, with the following amended paragraph:

Next, resist masks 612 to 617 are formed by the photolithography technique that uses a photo-mask 2 (PM2). The conductor layer (A) 610 and the conductor layer (B) 611 are collectively etched so as to form the gate electrodes 618 to 622 and the capacitance lead wire 623. The gate electrodes 618 to 622 and the capacitance lead wire 623 have a unitary structure of 618a to [[622a]] 623a comprising the conductor layer (A) and 618b to [[622b]] 623b comprising the conductor layer (B) (Fig. 9(A)).

Please replace the paragraph bridging pages 40 and 41, with the following amended paragraph:

After the activation and hydrogenation steps are completed, an inter-layer insulation film [[147]] 647 made of an organic insulating material is formed to a mean film thickness of 1.0 to 2.0 μm. Examples of the organic resin materials are polyimide, acryl, polyamide, polyimidamide and BCB (benzocyclobutene). When the polyimide of the type that is thermally polymerized after being applied to the substrate is used, for example, the inter-layer insulation film is formed by baking the resin material at 300°C

inside a clean oven. When the acrylic resin is used, a two-liquid type is used. Namely, after a main agent and curing agent are mixed, the resin is applied to the entire surface of the substrate by a spinner, followed by preparatory heating at 80°C for 60 seconds by a hot plate and then by baking at 250°C for 60 minutes inside a clean oven.

Please replace the paragraph bridging pages 41 and 42, with the following amended paragraph:

A conductive metal film is formed by sputtering or vacuum deposition, and a resist mask pattern is formed by using a photo-mask 6 (PM6). Etching is conducted subsequently to form source lead wires 648 to 652 and drain lead wires 653 to [[658]] 657. Here, the drain lead wire 657 functions as the pixel electrode. This electrode comprises a Ti film formed to a thickness of 50 to 150 nm, though not shown in the drawing. Contact with the semiconductor film forming the source or drain region of the island-like ~~semicnductor~~ semiconductor film is established, and aluminum (Al) is formed to a thickness of 300 to 400 nm in superposition with, and on, the Ti film, giving the lead wire.

Please replace the paragraph beginning at page 47, line 12, with the following amended paragraph:

In Embodiment 1, the shading layers ~~405 and 406~~ 404 and 405 are disposed below the TFT device whenever necessary, but in this embodiment, the sensor device itself functions also as the shading layer. Accordingly, the process steps can be reduced, and the erroneous operation (cross-talk) of the TFT device due to backlight necessary for the display in the transmission mode can be prevented.

Please replace the paragraph beginning at page 48, line 10 with the following amended paragraph:

Although in Embodiment 1, shading layers ~~405 and 406~~ 404 and 405 are formed under the TFT device as occasion demands, in this Embodiment 4, the gate electrode 808 of the TFT device serves as a shading layer, too. Thereby, the step of exclusively providing a shading layer can be shortened, and malfunction (cross-talk) of the TFT device by a backlight which is necessary for a transmission-mode display can be prevented.

Please replace the paragraph bridging pages 49 and 50 with the following amended paragraph:

Reference numeral 101 denotes pixel TFT and reference numeral 102 [[does]] denotes a liquid crystal. Reference numeral 103 denotes an auxiliary capacitance and reference numeral 104 [[does]] denotes a sensor TFT. Reference numeral 105 denotes a photo diode PD and reference numeral 106 denotes an auxiliary capacitance. Reference numeral 107 denotes a signal amplification TFT and reference numeral 108 [[does]] denotes a reset TFT. Reference numerals 109 and 110 denote analog switches. Reference numeral 120 denotes a bias TFT and reference numeral 121 denotes a transfer TFT. Reference numeral 122 denotes a sample-and-hold capacitance and reference numeral 123 denotes a discharge TFT. Reference numeral 124 denotes an amplification TFT for a final buffer and reference numeral 125 denotes a bias TFT for a final buffer. The circuit comprising these members 101 to 108 will be referred to as a "matrix circuit". The members 101 and 103 are the pixel portion A, and the members 104 to 108 are the sensor portion B. Reference numeral 111 denotes a sensor output signal line and reference numeral 112 denotes an image input signal line. Reference ~~numeral 114 denotes a fixed potential line~~ numerals 113 and 114 denote

fixed potential lines and reference numeral 115 denotes a pixel source signal line side driving circuit. Reference numeral 116 denotes a pixel gate signal line side driving circuit and reference numeral 117 denotes a sensor horizontal driving circuit. Reference numeral 118 denotes a sensor vertical driving circuit.